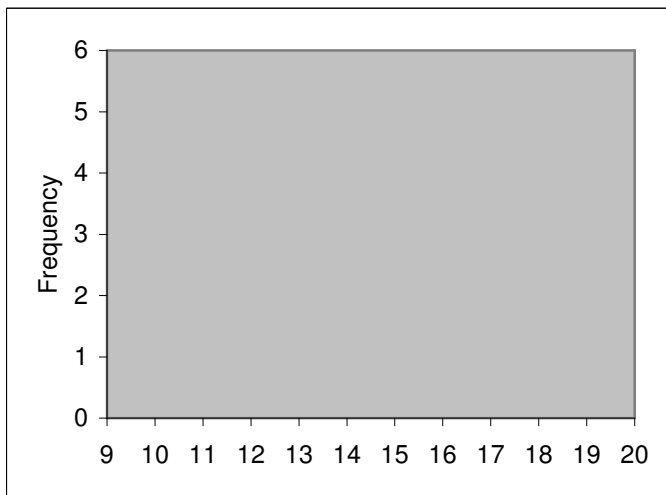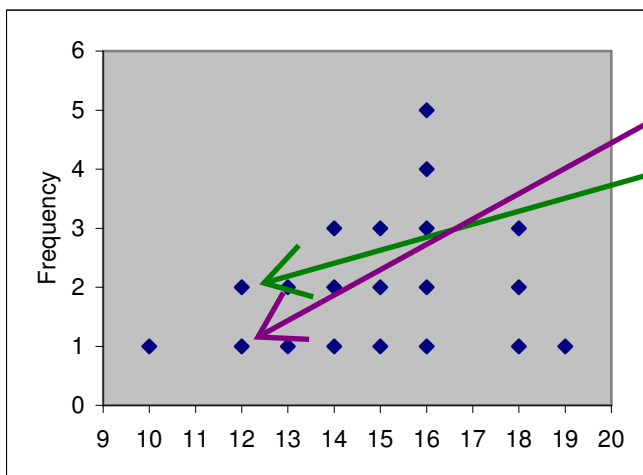**How To Create a Dot Plot by Hand:**

1. Find your smallest and largest data point.
2. Make a horizontal axis that starts at one less than your smallest data point ends at one more than your largest data point and has equally spaced steps in between. Attach to that axis a vertical axis that has equally spaced steps that start at 0 and end with at least the number of times the mode appears.
3. Place one dot for each data point.

Ex: Let's look at the following data set: 12 15 16 16 14 12 14 18 19 14 15 18 16 13 15 16 13 10 18 16.

The smallest data point is 10 and the largest is 19. Our mode is 16 and it appears 5 times. Here is what our axes should look like.

Now we need to place a dot for each data point.

Data is:
12 15 16 16 14 12 ...
Put a "dot" for ONE value. For another SAME value, put a "dot" above the previous dot. do the process for all values.

From the data plot, we can EASILY see that what is pattern/shape of data:
=> 10 is repeated 1 time
=> 12 is repeated 2 times
=> 13 is repeated 13 times
=> 14 is repeated 3 times
and so on